Bloomington Environmental Action Plan

City of Bloomington Environmental Commission

Introduction

Goals

- To reduce Bloomington's greenhouse gas (GHG) emissions that contribute to climate change
- To make the community more resilient in the face of an already changing climate
- To preserve the quality of Bloomington's environment

Purpose of the BEAP

- To present policies and initiatives that will reduce GHG emissions 17% from a 2014 baseline by 2020 while enhancing the environment

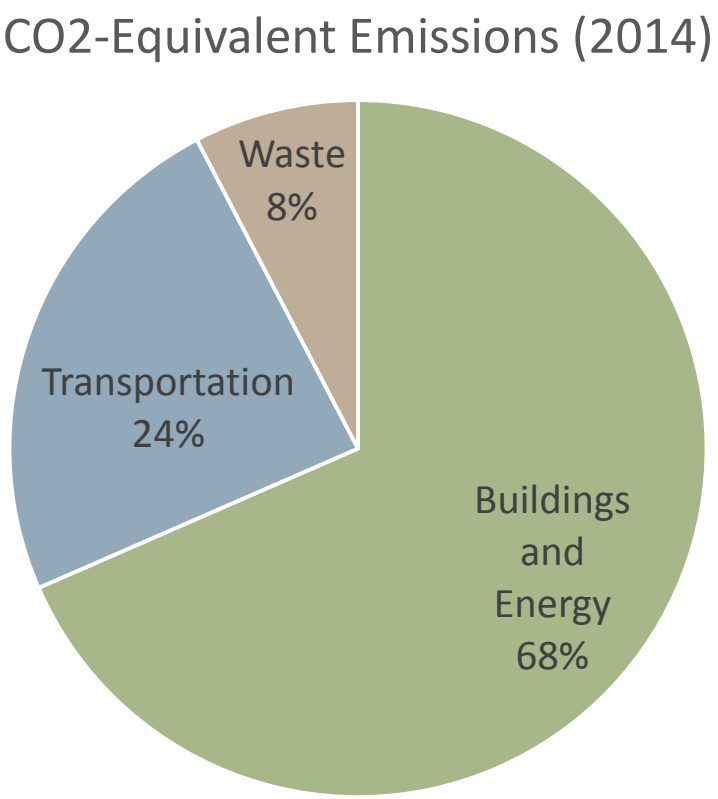
Greenhouse Gas Emissions

Bloomington released 1.95 million metric tons of carbon dioxide equivalent (Co2-e) emissions in 2014.

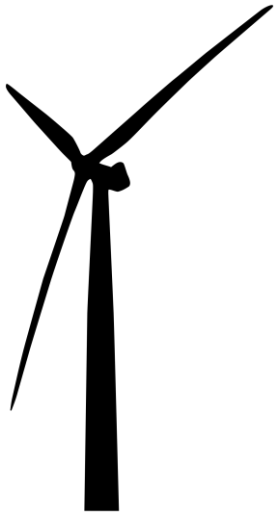
Reduction targets will reduce CO2-e to 1.62 million metric tons.

2020 Reduction Targets

- Buildings and energy: ↓20%
- Transportation: ↓10%
- Waste: ↓15%



Buildings and Energy



Reduce energy consumption in all of Bloomington's buildings by 20%

Promote informed energy retrofit and consumption decision-making

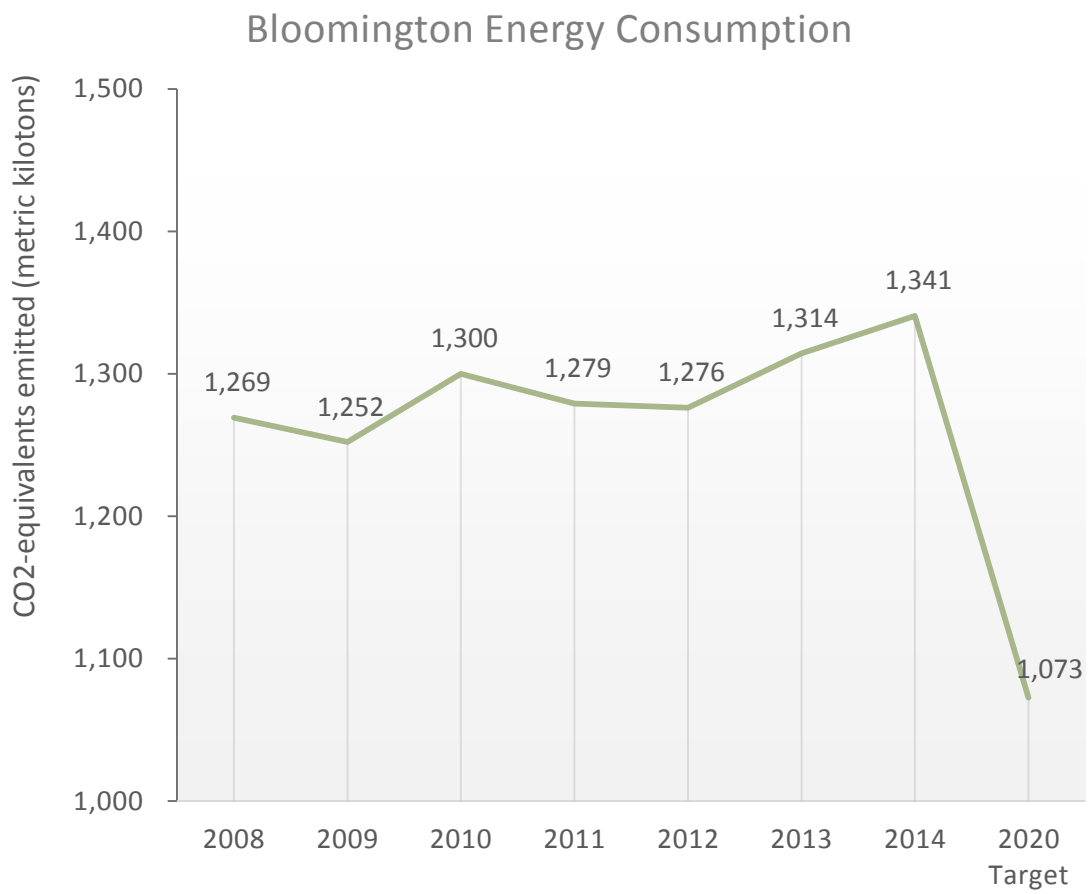
Build a renewable energy portfolio in Bloomington

Buildings and Energy

Buildings and energy are the largest contributors to Bloomington's GHG emissions.

The goal is to reduce energy consumption by 20% from 2014 levels by 2020.

Improving energy efficiency, encouraging conservation, and developing renewable energy infrastructure will reduce GHG emissions from buildings and energy.

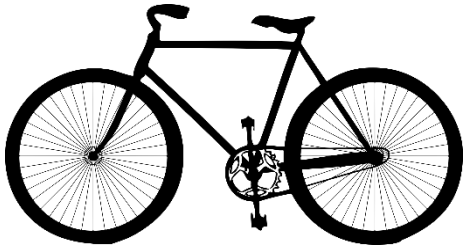


Buildings and Energy

Some actions to achieve reductions in building emissions include

- Change building ordinances to increase energy efficient building practices
- Encourage homeowners to insulate attics and take other efficiency measures
- Create a database of utility information on rental units
- Require sub-metering for individual units in multi-unit buildings
- Study feasibility of renewable energy in Bloomington
- Develop an energy master plan for the City of Bloomington
- Install solar panels on City Hall

Transportation



Reduce vehicle-miles traveled in Bloomington by 10%

Ensure that all Bloomington residents have safe access to transit and can walk or bicycle to meet all non-work needs

Transportation

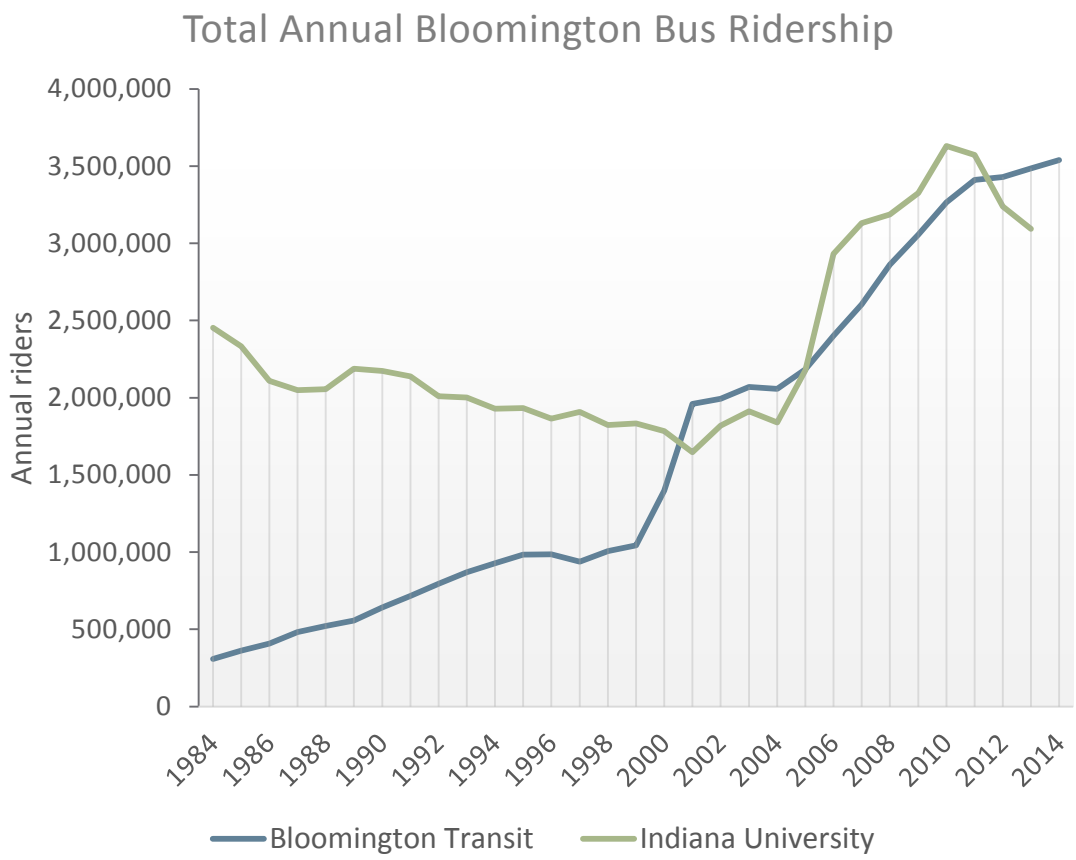
Transportation is the second largest contributor to Bloomington's GHG emissions.

The goal is to reduce transportation emissions by 10%.

Bicycle lane and path miles have increased 80% since 2010.

Annual bus ridership for Bloomington Transit continues to increase, while IU bus ridership has decreased slightly since 2010.

Developing infrastructure for biking, walking, and public transit will reduce the use of personal automobiles, a major contributor to transportation emissions.



Transportation

Some actions to achieve reductions in transportation emissions include

- Promote telework for City Hall employees
- Lobby Indiana legislators for a local tax to increase Bloomington Transit funding
- Increase the amount of covered bicycle structures
- Make “20-Minute-Neighborhoods” a core component of the Comprehensive Master Plan
- Improve pedestrian sidewalks and crosswalks
- Increase the frequency of bicycle courses offered at city facilities

Air Quality

Conduct air sampling tests in Bloomington

Air Quality

Air quality affects public health, the environment, and property. Some sources of air pollution include: vehicles, industry, power plants, agriculture, and natural sources.

The only air pollution monitor currently operating in Monroe County is for fine particulate matter.

- Fine particulate matter levels have generally been within the national standards since monitoring began in 2009.
- IDEM does not monitor for some other pollutants in Monroe County, because they are generally low in Indiana or they are source-specific.
- Ozone is a pollutant of concern for IDEM. The nearest ozone monitor is in Greene County.

Air Quality

Some actions to improve air quality include

- Install air monitors
- Develop fugitive dust containment guidelines for construction sites
- Determine and monitor how many asthmatics are in the Bloomington community

Urban Ecology

Measure current tree canopy coverage in Bloomington, and work to reach 40% coverage

Promote biodiversity by protecting, enhancing, and expanding natural wildlife habitat areas

Reduce energy consumption and nonpoint source pollution by implementing green infrastructure best management practices

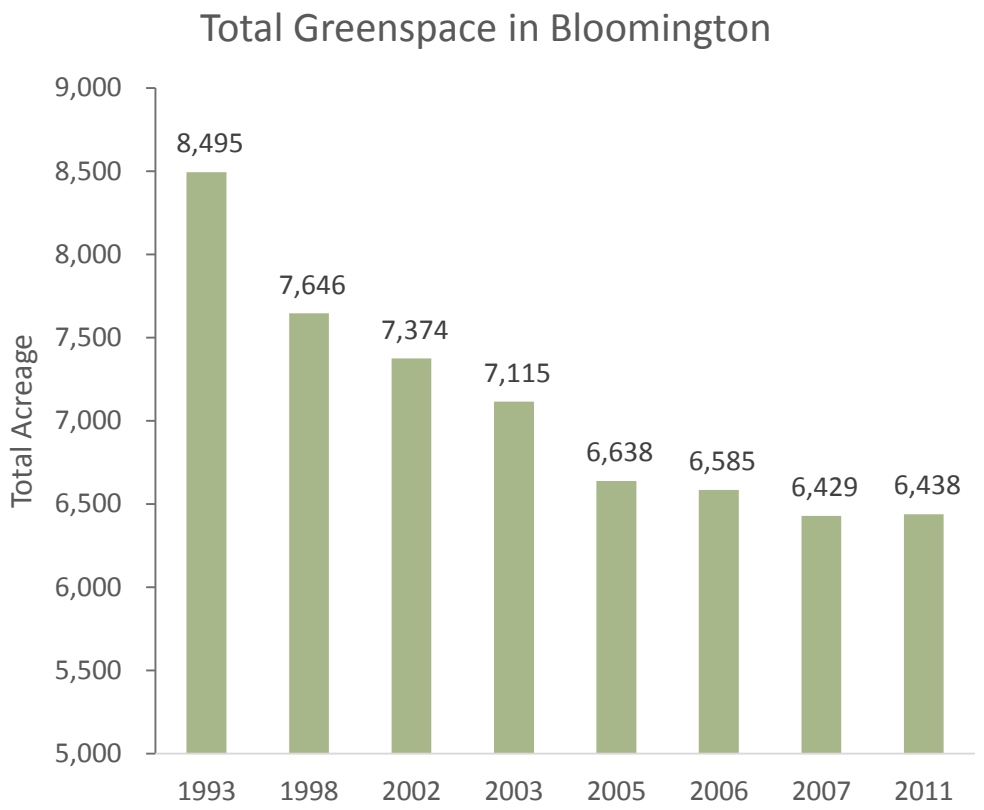
Urban Ecology

Urban forests provide a variety of environmental benefits, including providing wildlife habitat, improving water and air quality, and sequestering carbon dioxide.

Plant and wildlife populations are threatened by land use changes, habitat degradation, invasive species, and climate change.

- Bloomington lost 24% of its greenspace between 1993 and 2011.

Green infrastructure incorporates natural processes to manage stormwater and provide other environmental services.

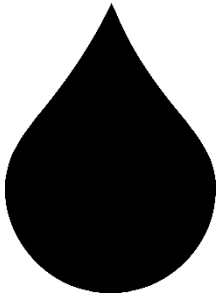


Urban Ecology

Some actions to improve urban ecology include

- Update codes to maximize tree preservation
- Expand programs promoting the benefits of urban forests
- Develop a policy outlining tree protection for contractors
- Create pocket parks to encourage wildlife mobility
- Join the National Wildlife Federation's Mayors' Monarch Pledge
- Hire additional Parks and Recreation employees to control invasive species
- Provide educational resources about invasive species management
- Implement green infrastructure techniques at city facilities
- Adopt a green infrastructure policy to manage stormwater

Water



Provide Bloomington residents with educational resources about why they should conserve water

Fix or replace 20 miles of clay drinking water transmission piping

Reduce greenhouse gas emissions from Bloomington's wastewater treatment plants

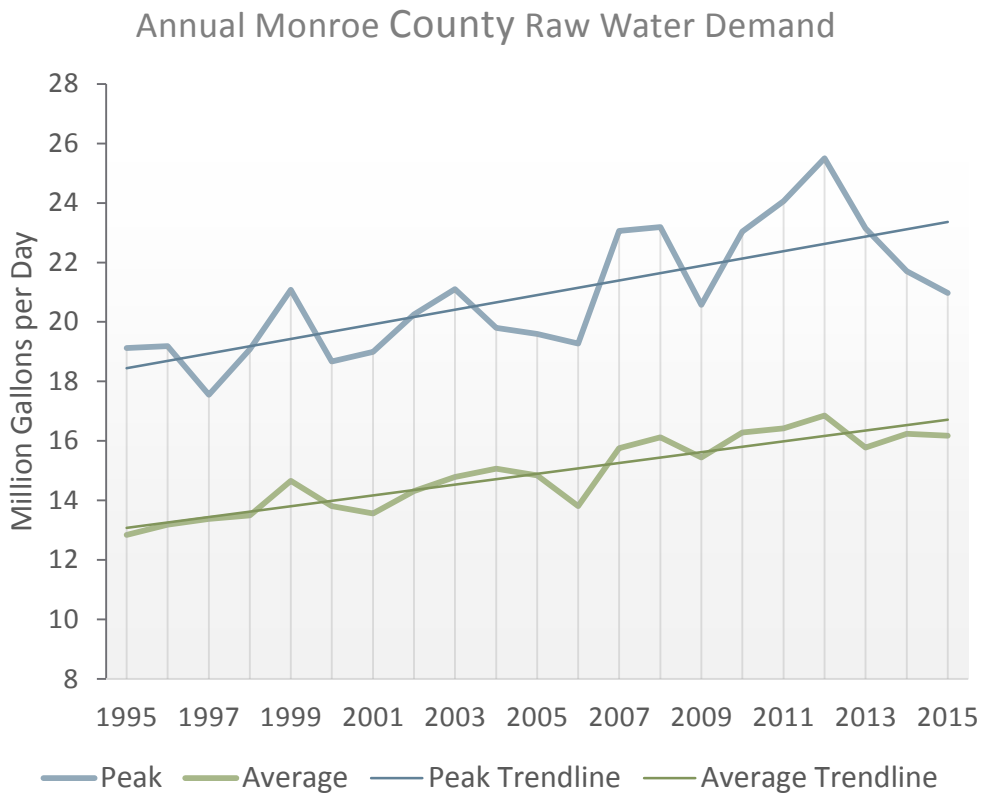
Water

In 2013, water treatment and pumping accounted for 24% of energy use and 31% of total city government GHG emissions.

A drought in the summer of 2012 led the city to put a restriction on water use due to limited treatment capacity.

Water extraction from Lake Monroe has increased by an average of 1.7% per year.

Water conservation efforts will help ensure there is an adequate water supply and reduce GHG emissions from water treatment and pumping.



Water

Some actions to conserve water include

- Expand educational campaigns to conserve water
- Require all new multi-unit buildings to sub-meter their water use
- Implement conservation billing and conservation pricing for water use
- Perform an audit of non-revenue water
- Create a water pipe leakage management plan
- Study the feasibility of anaerobic wastewater treatment

Food and Agriculture

Build a resilient system of local food production and consumption

Food and Agriculture

Less than 5% of the food consumed in Bloomington comes from Indiana, and less than 2% comes from within city limits or the surrounding counties.

An estimated 17% of American energy use is taken up by our food system due to traveling long distances and other industrial agriculture practices.

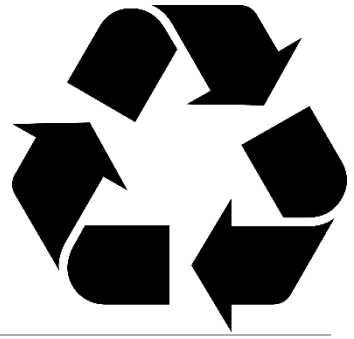
Supporting local food systems will reduce GHG emissions from industrial food production and transportation and it will improve community resilience.

Food and Agriculture

Some actions to improve food systems include

- Support the creation of a local food hub
- Increase the number of community gardens
- Develop an educational campaign about the impacts of food systems
- Revise the city's urban agriculture regulations

Waste



Reduce the amount of waste going to the landfill by 15%

Waste

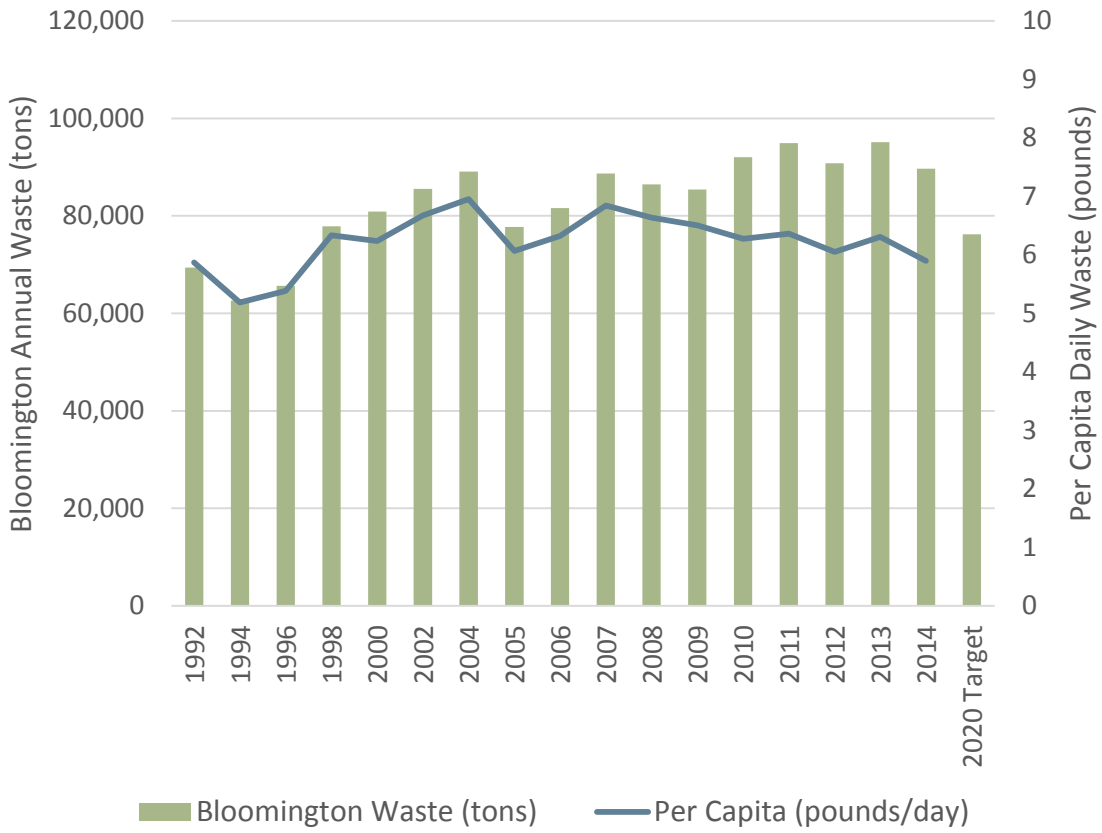
Landfilled waste accounts for approximately 8% of Bloomington's GHG emissions.

Bloomington's annual estimated 90,000 metric tons of solid waste travels 55 miles to a landfill.

Bloomington's recycling rate is 36%, compared to a national average of about 34%.

About 96% of the food waste we throw away could be composted.

Reducing the amount of waste going to the landfill will reduce GHG emissions from transportation and the methane created in the landfill.



Waste

Some actions to reduce waste include

- Support the creation of a compost facility
- Educate the public about composting
- Expand curbside recycling pickup
- Require all multi-unit buildings to have adequate recycling facilities
- Promote using deconstruction services for demolition projects

Summary

Proposed actions will reduce GHG emissions 17% from a 2014 baseline and improve the quality of Bloomington's environment.

- Energy conservation, efficiency, and renewables
- Public transportation, biking, walking
- Air quality
- Natural environment and green infrastructure
- Water conservation
- Local food systems
- Waste reduction

What can you do to help?

Submit suggestions by emailing environment@bloomington.in.gov

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